

5 Method for Treating a Subject Suffering From Conditions
Associated With an Extracellular Zinc Sphingomyelinase10 Abstract of the Disclosure

The present invention provides for a method for treating a subject suffering from a condition associated with an extracellular zinc sphingomyelinase activity which comprises administering to the subject an amount of a zinc sphingomyelinase inhibitor effective to decrease extracellular zinc sphingomyelinase activity in the subject and thereby treat the subject. The present invention also provides for a method for determining whether a compound inhibits an activity of an extracellular zinc sphingomyelinase involving ceramide formation which comprises: (a) contacting a sample containing zinc sphingomyelinase under acidic pH conditions known to be associated with the activity of such zinc sphingomyelinase, with: (i) a substrate of the zinc sphingomyelinase enzyme, and (ii) the compound being evaluated; (b) measuring the ceramide in the sample from (a); (c) determining the amount of zinc sphingomyelinase activity in the sample based on the concentration of ceramide measured in step (b); and (d) comparing the amount of sphingomyelinase activity determined in step (c) with the amount of sphingomyelinase activity determined in the absence of the compound, so as to determine whether the compound inhibits the activity of zinc sphingomyelinase.